

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Please cancel claims 8-11, 13, 14, 18-20, 22, 28, 29 and 32 without prejudice.

Please amend claims 1, 7, 12, 17, 23, 24, 26 and 27 as indicated below (material to be inserted is in underline, material to be deleted is in ~~strikeout~~):

Listing of Claims:

1. (Currently Amended) A system for identifying media type in a media processing device, the system comprising:
 - a thermal energy source; and
 - a thermal energy sensor;wherein the thermal energy source and thermal energy sensor are arranged along a media feed path so as to accommodate transfer of thermal energy to the media by the thermal energy source, diffusion of such thermal energy, and subsequent sensing of such diffused thermal energy to determine a heat capacity of the media, ~~such heat capacity being indicative of and thereby, to identify media type.~~
2. (Original) The system of claim 1, wherein the thermal energy source and the thermal energy sensor are oriented in a line parallel with a media feed path, the thermal energy sensor being downstream from the thermal energy source.
3. (Original) The processing device of claim 1, wherein the thermal energy source is a heat source.
4. (Original) The system of claim 1, further comprising a shield disposed about the thermal energy source so as to direct thermal energy generated by the thermal energy source toward the feed path.

5. (Original) The system of claim 1, further comprising a shield disposed about the thermal energy sensor to direct heat radiated from the feed path toward the thermal energy sensor.

6. (Original) The system of claim 1, wherein the thermal energy source includes an infrared heat source.

7. (Currently Amended) The system of claim 1, wherein the thermal energy sensor includes at least one of a thermocouple device, a semiconductor device, a polyvinylidene fluoride sensor, and a passive infrared sensor.

8. (Cancelled)

9. (Cancelled)

10. (Cancelled)

11. (Cancelled)

12. (Currently Amended) A media processing device comprising:

a media feed mechanism configured to pass media downstream along a media feed path;

a heat source disposed along the feed path to heat media passing downstream along the media feed path;

a temperature sensor disposed along the feed path downstream from the heat source, the temperature sensor being configured to sense temperature of media passing downstream from the heat source;

a processor coupled with the temperature sensor to selectively identify media type based on sensed temperature of the media as compared to a reference temperature.

13. (Cancelled)

14. (Cancelled)

15. (Original) The media processing device of claim 12, wherein the media processing device is a printer.

16. (Original) The media processing device of claim 12, wherein the heat source is an infrared heat source.

17. (Currently Amended) The media processing device of claim 12, wherein the temperature sensor includes at least one of a thermocouple device, a semiconductor device, a polyvinylidene fluoride film device, and a passive infrared sensor.

18. (Cancelled)

19. (Cancelled)

20. (Cancelled)

21. (Original) The media processing device of claim 12, further comprising:

a first shield disposed around the heat source; and

a second shield disposed around the temperature sensor;

wherein the first shield directs thermal energy from the heat source toward the feed path and the second shield directs thermal energy from the feed path toward the temperature sensor.

22. (Cancelled)

23. (Currently Amended) ~~The media processing device of claim 12, further comprising~~ A media processing device comprising:

a media feed mechanism configured to pass media downstream along a media feed path;

a heat source disposed along the feed path to heat media passing downstream along the media feed path;

a temperature sensor disposed along the feed path downstream from the heat source, the temperature sensor being configured to sense temperature of media passing downstream from the heat source;

a processor coupled with the temperature sensor to selectively identify media type based on sensed temperature of the media; and

a keyed shield interposed the temperature sensor and the feed path to selectively periodically shield the temperature sensor from thermal energy radiated by media passing downstream from the heat source, whereby such periodically shielded sensing produces a waveform representative of heat capacity of the media.

24. (Currently Amended) The media processing device of claim 23, wherein the processor is configured to receive the waveform representative of heat capacity of the media, such and from such heat capacity ~~being indicative of to~~ determine media type.

25. (Original) The media processing device of claim 12, wherein the processor is configured to modify toner fuser speed based on media type.

26. (Currently Amended) A method of determining media type, the method comprising:

applying thermal energy to media to define heated and unheated patches of media;

feeding the media downstream along a media feed path;

sensing thermal energy radiated from the heated and unheated patches of media; and

calculating a heat capacity of the media based on the thermal energy radiated from the heated and unheated patches of media.

27. (Currently Amended) ~~The method of claim 26 which further comprises~~
A method of determining media type, the method comprising:

applying thermal energy to media;

feeding the media downstream along a media feed path;

sensing thermal energy radiated from the media;

calculating a heat capacity of the media based on the thermal energy radiated from the media; and

determining a reference thermal energy by measuring thermal energy radiated from a reference surface, heat capacity being based on a comparison of thermal energy radiated from the media with thermal energy radiated from the reference surface.

28. (Cancelled)

29. (Cancelled)

30. (Original) A media processing device comprising:

media feed means configured to pass media downstream along a media feed path;

heating means disposed along the feed path for applying thermal energy to media passing downstream along the media feed path;

temperature-sensing means disposed along the feed path downstream from the heat source for selectively sensing temperature of media passing downstream from the heating means;

a processor means coupled with the temperature-sensing means for receiving an output representative of the sensed temperature, determining heat capacity of the media based on such output, and identifying media type based on such heat capacity.

31. (Original) The media processing device of claim 30, which further comprises reference means for determining ambient temperature, the processor means being configured to determine heat capacity based on a comparison between such ambient temperature and such sensed temperature.

32. (Cancelled)